

What is Claimed:

*Sab A 1*

1. A system for providing auxiliary data from a television receiver comprising:  
3        a terminal for applying a data stream to the television receiver, the data stream including a television signal and the auxiliary data;  
4  
5        a controller which processes the data stream to extract the auxiliary data;  
6  
7        a communications channel for coupling the television receiver to the at least one shared data device to transfer the auxiliary data from the controller to the shared data device.

2. A system according to claim 1, wherein the television receiver is a set top box and the system further includes:

3        a display device;  
4        an audio processor; and  
5        a video processor;

6        wherein the controller extracts the television signal from the data stream, divides the data stream into separate audio and video components and provides the audio components to the audio processor and the video components to the video processor and, wherein the video processor provides processed video signals for display on the display device.

1        3. A system according to claim 2 further comprising a digital video tape recorder coupled to the television receiver.

1        4. A system according to claim 1, wherein each shared data device is at least one of a printer, a digital video tape recorder and a personal digital assistant.

1        5. A system for processing auxiliary data sent with a digital television signal comprising:

3           at least one television receiver for receiving and processing the digital television signal,  
4       to provide a processed television signal, and to provide the auxiliary data signal in  
5       accordance with a shared data device communications channel protocol;

6           said at least one shared data device;

7           a shared data device communications channel, that operates according to the  
8       shared data device communications channel protocol, for coupling the television  
9       receiver to the at least one shared data device; and

10          a display device for receiving and displaying the processed television signal.

1           6. A system according to claim 5, wherein the television receiver is a set  
2       top box.

1           7. A system according to claim 6 further comprising a digital video tape  
2       recorder coupled to the television receiver.

1           8. A system according to claim 5, wherein each of the at least one shared  
2       data device is selected from a group consisting of a further set top box, a printer, a  
3       digital video tape recorder, and a personal digital assistant.

1           9. A television receiver comprising:

1           a front end interface for receiving and processing a digital television signal and  
2       providing video and audio signals;

1           a remote control receiver for receiving an initialization signal and providing a  
2       control signal;

1           a video processing and decoding portion for receiving, processing, and  
2       decoding the video signal and providing an output video signal;

1           an audio processing and decoding portion for receiving, processing, and  
2       decoding the audio signal and providing an output video signal;

1           a controller for receiving the video, audio and initialization signals, and  
2       providing formatted data signals and control signals;

1           an output interface portion coupled to a communication channel for receiving  
2       the output audio and video signals and for providing the output audio and video  
3       signals for presentation; and

15        a shared data decoder and formatter coupled to the controller for receiving the  
16 data signals and, responsive to the initialization signal, for formatting the data signal  
17 according to a predetermined format and for providing the formatted data signal in  
18 accordance with a communications channel protocol.

1        10. A television receiver in accordance with claim 9, wherein the television  
2 receiver is a set top box.

1        11. A television receiver in accordance with claim 9 further comprising at  
2 least one shared data device coupled to said shared data communications channel for  
3 receiving the formatted data signal in accordance with the communications channel  
4 protocol.

1        12. A television receiver in accordance with claim 9 further including a  
2 memory buffer coupled between the shared data decoder and formatter and the shared  
3 data communications channel.

1        13. A television receiver in accordance with claim 11 wherein each shared  
2 data device is one of a set top box, a printer, a digital video tape recorder, and a  
3 personal digital assistant.

1        14. A method for transferring auxiliary data from a television receiver to  
2 shared data device comprising the acts of:

- 3        a) receiving an initialization signal;
- 4        b) decoding the initialization signal to determine a type of shared data  
5 device to receive the auxiliary data;
- 6        c) acquiring a page of the auxiliary data;
- 7        d) formatting the page of auxiliary data in accordance with requirements of  
8 the type of shared data device; and
- 9        e) transferring said page of data to said shared data device.

1        15. The method according to claim 14, wherein acts c) through e) are  
2 repeated for each page of auxiliary data to be transferred.

1        16. The method according to claim 14, wherein the act of transferring said  
2 page of auxiliary data to said shared data device further includes the act of

- 3 transferring said page of data according to a protocol suitable for one of a set top box,
- 4 a printer, a digital video tape recorder, and a personal digital assistant.